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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,002	04/05/2004	Taichi Kobayashi	Q80862	2744

23373 7590 10/21/2005  
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WASHINGTON, DC 20037

EXAMINER
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KUGEL, TIMOTHY J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/817,002

Applicant(s)

KOBAYASHI ET AL.

Examiner

Timothy J. Kugel

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2005 and 08 July 2005 and 20 Se.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 and 11-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 26-32 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/5/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-32 are pending as amended on 5 April 2004. Claims 7-9 and 11-25 are withdrawn from further consideration.

#### *Election/Restrictions*

2. Applicant's election without traverse of the invention of Group I, claims 1-10 and 26-32, in the reply filed on 18 March 2005 is acknowledged.

Claims 11-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 18 March 2005.

3. Applicant's election without traverse of the species of diimmonium compound of claim 3, in the reply filed on 18 March 2005 is acknowledged.

Claims 8 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 18 March 2005.

4. Applicant's election without traverse of the species of  $\text{SbF}_6^-$  in claim 4 and naphthalene-1,5-disulfonic acid in claim 5, in the reply filed on 18 March 2005 is acknowledged.

Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 18 March 2005.

***Priority***

5. Acknowledgment is made of applicant's claim for foreign priority based on an application filed with the World Intellectual Property Organization on 2 October 2002. It is noted, however, that applicant has not filed a certified copy of the PCT/JP02/10252 application as required by 35 U.S.C. 119(b).

***Information Disclosure Statement***

6. Regarding the references JP10-180922, JP-11-316309, JP2001-174626 and JP11-133868, the information disclosure statement filed 5 April 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the references are in Japanese. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Objections***

7. Claim 31 is objected to because of the following informalities: the word 'polyolifine' should be 'polyolefin'. Appropriate correction is required.

***Claim Interpretation***

8. Claim 1 uses the transitional term 'having', which has been construed as being synonymous with 'comprising', which is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.

9. Claims 2, 10, 26 and 28 use the transitional term 'contains', which has been construed as being synonymous with 'comprises', which is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.

10. Claim 27 uses the term '(meth)acrylic acid ester', which has been construed to mean "acrylic acid ester or methacrylic acid ester".

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

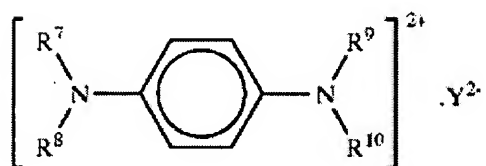
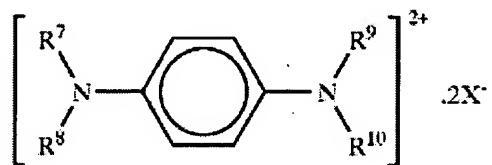
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 3-6, 27, 28 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 3, the claim recites, "...wherein the diimmonium compound is at least one of..." the article 'the' implies a single diimmonium compound, while the phrase 'at least one' implies the possibility of multiple diimmonium compounds.

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Further, claim 3 recites the chemical formulae

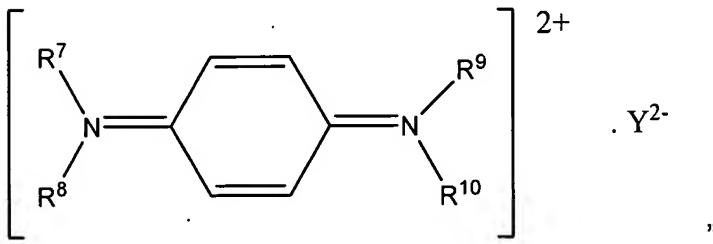
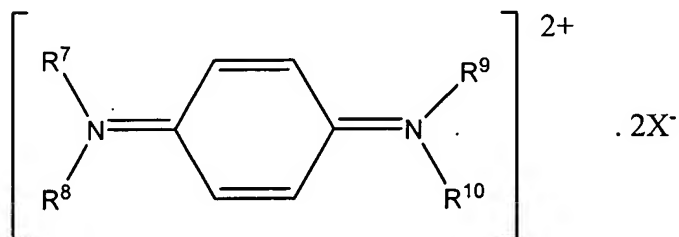


but it is unclear how the cation is formed, as the

species  $\begin{array}{c} R^7 \\ \diagup \\ N \\ \diagdown \\ R^8 \end{array} - \text{C}_6\text{H}_4 - \begin{array}{c} R^9 \\ \diagup \\ N \\ \diagdown \\ R^{10} \end{array}$  should be neutral based on the trivalent nitrogen atom shown.

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For the purpose of examination, claim 3 was construed to recite, "...wherein the diimmonium compound is selected from the compounds represented by the formulae



14. Regarding claims 4, 5, 28 and 31 the phrase "such as" or "e.g." renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Additionally, regarding claims 5 and 28, the inclusion of a term within parentheses renders the claim indefinite because it is unclear whether the included term is part of the claimed invention.

Additionally, regarding claim 5, it is unclear what the terms R acid, G acid, H acid, γ acid, ε acid and J acid represent.

For the purpose of examination, claim 4 was construed to recite, "...wherein the monovalent anion represented by X<sup>-</sup> is selected from the group consisting of I<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>,

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$F^-$ ,  $NO_3^-$ ,  $BF_4^-$ ,  $PF_6^-$ ,  $ClO_4^-$ ,  $SbF_6^-$ ,  $CH_3COO^-$ ,  $CF_3COO^-$ , benzoic acid ion,  $CH_3SO_3^-$ ,  $CF_3SO_3^-$ , benzene sulfonic acid ion and naphthalenesulfonic acid ion.”

For the purpose of examination, claim 5 was construed to recite, “...wherein the divalent anion represented by  $Y^{2-}$  is selected from the ions of the group consisting of naphthalene-1,5-disulfonic acid, R acid, G acid, H acid, benzoyl H acid, p-chlorobenzoyl H acid, p-toluenesulfonyl H acid, chloro H acid, chloroacetyl H acid, metanyl  $\gamma$  acid, 6-sulfonaphthyl- $\gamma$  acid, C acid,  $\epsilon$  acid, p-toluenesulfonyl R acid, naphthalene-1,6-disulfonic acid, 1-naphthol-4,8-disulfonic acid, carbonyl J acid, 4,4-diaminostilbene-2,2'-disulfonic acid, di-J acid, naphthalic acid, naphthalene-2,3-dicarboxylic acid, diphenic acid, stilbene-4,4'-dicarboxylic acid, 6-sulfo-2-oxy-3-naphthoic acid, anthraquinone-1,8-disulfonic acid, 1,6-diaminoanthraquinone-2,7-disulfonic acid, 2-(4-sulfophenyl)-6-aminobenzotriazole-5-sulfonic acid, 6-(3-methyl-5-pyrazolonyl)-naphthalene-1,3-disulfonic acid and 1-naphthol-6-(4-amino-3sulfo)anilino-3-sulfonic acid.”

For the purpose of examination, claim 28 was construed to recite, “...wherein the near-infrared absorption layer further contains a near infrared absorbent of the azo series, polymethine series, diphenylmethane series, triphenylmethane series or quinine series; an antioxidant of the phenol series, amine series, hindered bis-phenol series, hindered amine series, sulfur series, phosphoric acid series, phosphorus acid series or metallic complex series; an UV absorbent; and a colorant, a pigment or a dye for improving the appearance of the film.”

For the purpose of examination, claim 31 was construed to recite, “...wherein the synthetic resin is selected from the group consisting of polyethylene, polypropylene,



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polyester resins, acrylic resins, cellulose resins, poly(vinyl chloride) resins, polycarbonate resins, phenol resins and urethane resins.

15. Claim 27 recites the limitation "...as claimed in claim 25, wherein the binder resin..." There is insufficient antecedent basis for this limitation in the claim.

For the purpose of examination, claim 27 was construed to recite, "...as claimed in claim 26, wherein the binder resin..."

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-3 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 10/696,312.

Although the conflicting claims are not identical, they are not patentably distinct from each other because copending application 10/696,312 claims a near infrared absorption film comprising a transparent substrate and a near infrared absorption layer comprising a diimmonium compound of the structures as claimed in instant claim 3.

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Since 10/696,312 claims the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the DSC of the diimmonium compound in the 10/696,312 composition would inherently be the same as claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102 and 35 USC § 103***

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-4, 10 and 26-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent Application 2001/0005278 (Onomichi hereinafter). Please note that Onomichi is an X-type

reference cited on the International Search Report for PCT/JP02/10252 from which the instant application is a continuation.

Onomichi teaches a near-infrared absorption film comprising a substrate comprising polyester resins, acrylic resins, cellulose resins, polyethylene resins, polypropylene resins, polyolefin resins, polyvinylchloride resins, polycarbonate resins, phenol resins, urethane resins and the like; and a infrared absorption layer comprising 0.1 to 10 % diimmonium salt as described in instant claims 1-4 including the elected species in a binder that may be a acrylic resins, cellulose resins, polyethylene resins, polypropylene resins, polyolefin resins, polyvinyl chloride resins, polycarbonate resins, phenol resins, urethane resins and the like and that may include near-infrared absorbents—such as those of the phthalocyanine, nickel complex, diimmonium salts, azo compounds, polymethines, diphenylmethane, triphenylmethane, quinone and the like; phenol—such as bisphenol A, ultraviolet absorbers, and coloring matter (¶¶0015, 0031-0032, 0071, 0077, 0085, 0102, 0111 and 01113).

Since Kobayashi teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the DSC of the diimmonium salt of the Kobayashi composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent

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rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C.

102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

21. Claims 1-6, 10 and 28-32 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent Publication JP2001-174626 (Kobayashi '626 hereinafter). Please note that Kobayashi '626 is an X-type reference cited on the International Search Report for PCT/JP02/10252 from which the instant application is a continuation.

Kobayashi '626 teaches a near-infrared absorption film comprising a substrate and an infrared absorption layer comprising 0.1 to 10 % diimmonium salt as described in instant claims 1-6 including the elected species in a binder resin that may be a homopolymer or a copolymer of polyester resin, acrylic resin, methacrylic resin, urethane resin, silicone resin, phenol resin, polyethylene terephthalate resin, (meth)acrylic acid ester, and the like. (Claim 4, ¶¶ 0016-0018 and 0034-0037).

Since Kobayashi '626 teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the DSC of the diimmonium salt of the Kobayashi '626 composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent

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rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C.

102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

22. Claims 1-6, 10 and 27-32 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent Application Publication 2005/0040378 (Kobayashi '378 hereinafter).

Kobayashi '378 teaches a near-infrared absorption film comprising a 50 to 200  $\mu\text{m}$  substrate comprising a resin of polyethylene, polypropylene, polyester, acrylic, cellulose, polyvinyl chloride, polycarbonate, phenolic, urethane, polyethylene terephthalate, and the like ( $\text{¶¶}$ 0041 and 0042); and a 0.5 to 50  $\mu\text{m}$  infrared absorption layer comprising 0.1 to 10 % diimmonium salt as described in instant claims 1-6 including the elected species in a binder resin that may be a homopolymer or a copolymer of polyester resin, acrylic resin, methacrylic resin, urethane resin, silicone resin, phenol resin, polyethylene terephthalate resin, (meth)acrylic acid ester, and the like that, and may include near-infrared absorbents other than the aforesaid diimmonium compound—such as those of the phthalocyanine, nickel complex, azo, polymethine, diphenylmethane, triphenylmethane and quinone types, antioxidants—such as those of the phenol, amine, hindered phenol, hindered amine, sulfur, phosphoric acid, phosphorous acid and metal complex types, ultraviolet absorbers, colorants for making the film more attractive, pigments and dyes ( $\text{¶¶}$ 0025-0028 and 0036-0042).

Since Kobayashi '378 teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the DSC of

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the diimmonium salt of the Kobayashi '378 composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

### **Conclusion**

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US 2002/0127395  
US 5,210,122

09-2002  
5-1993

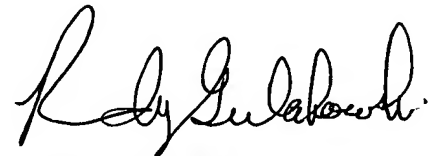
Kuwabara  
Fontana

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK  
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RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
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